GenCore version 5.1.7


OM protein - nucleic search, using frame_plus_p2n model

Run on: March 3, 2006, 08:29:11 ; Search time 3415 Seconds
(without alignments)
1959.166 Million cell updates/sec

Title: US-10-759-548B-5
Perfect score: 706
Sequence: 1 MALSLSLARPAPLAVSAGAG.....SDYDNVTGALPYLKVNRKAN 143

Scoring table: BLOSUM62
Xgapop 10.0 , Xgapext 0.5
Ygapop 10.0 , Ygapext 0.5
Fgapop 6.0 , Fgapext 7.0
Delop 6.0 , Delext 7.0

Searched: 41078325 seqs, 23393541228 residues

Total number of hits satisfying chosen parameters: 82156650

Minimum DB seq length: 0
Maximum DB seq length: 2000000000

Post-processing: Minimum Match 0%
Maximum Match 100%
Listing first 45 summaries

Command line parameters:
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-Q=/abss/ABSSWEB_spool/US10759548/runat_02032006_160942_17044/app_query.fasta_1
-DB=EST -QFMT=fastap -SUFFIX=rst -MINMATCH=0.1 -LOOPCL=0 -LOOPEXT=0
-UNITS=bits -START=1 -END=-1 -MATRIX=blosum62 -TRANS=human40.cdi -LIST=45
-DOCALIGN=200 -THR_SCORE=pct -THR_MAX=100 -THR_MIN=0 -ALIGN=15 -MODE=LOCAL
-OUTFMT=pto -NORM=ext -HEAPSIZE=500 -MINLEN=0 -MAXLEN=2000000000 -HOST=abss07
-USER=US10759548_@CGN_1_1_6731_@runat_02032006_160942_17044 -NCPU=6 -ICPU=3
-NO_MMAP -NEG_SCORES=0 -WAIT -DSPBLOCK=100 -LONGLOG -DEV_TIMEOUT=120
-WARN_TIMEOUT=30 -THREADS=1 -XGAPOP=10 -XGAPEXT=0.5 -FGAPOP=6 -FGAPEXT=7
-YGAPOP=10 -YGAPEXT=0.5 -DELOP=6 -DELEXT=7

Database : EST:*
1: gb_est1:*
2: gb_est2:*
3: gb_est3:*
4: gb_htc:*
5: gb_est4:*
6: gb_est5:*
7: gb_est6:*
8: gb_est7:*
9: gb_gss1:*
10: gb_gss2:*
11: gb_gss3:*

Pred. No. is the number of results predicted by chance to have a score greater than or equal to the score of the result being printed, and is derived by analysis of the total score distribution.

SUMMARIES

| | Result No. | Score | % Query Match | Length | DB | ID | Description |
|---|---|---|---|---|---|---|---|
| | 1 | 706 | 100.0 | 443 | 3 | BI358791 | BI358791 949040H08 |
| c | 2 | 706 | 100.0 | 555 | 3 | BI478792 | BI478792 949070F06 |
| c | 3 | 706 | 100.0 | 593 | 3 | BI993293 | BI993293 1020075G1 |
| | 4 | 706 | 100.0 | 803 | 1 | AI001298 | AI001298 MEST6-D3. |
| | 5 | 706 | 100.0 | 868 | 4 | AY108827 | AY108827 Zea mays |
| | 6 | 687 | 97.3 | 554 | 2 | BG410559 | BG410559 947050C09 |
| | 7 | 686.5 | 97.2 | 643 | 7 | CN141441 | CN141441 OX1_51_D0 |
| | 8 | 679 | 96.2 | 626 | 5 | BQ635741 | BQ635741 1091071H1 |
| | 9 | 678.5 | 96.1 | 731 | 6 | CA236566 | CA236566 SCSBFL501 |
| | 10 | 675.5 | 95.7 | 525 | 6 | CA128302 | CA128302 SCJFLR203 |
| | 11 | 673 | 95.3 | 430 | 2 | BI233829 | BI233829 949032H11 |
| | 12 | 658 | 93.2 | 412 | 2 | BG317125 | BG317125 947025F08 |
| | 13 | 656.5 | 93.0 | 573 | 8 | DN144120 | DN144120 4816_H11 |
| | 14 | 654 | 92.6 | 538 | 2 | BG354513 | BG354513 947038C07 |
| | 15 | 654 | 92.6 | 542 | 5 | BU092662 | BU092662 946155D06 |
| c | 16 | 650 | 92.1 | 755 | 2 | BG320303 | BG320303 Zm03_12e0 |
| c | 17 | 641 | 90.8 | 499 | 3 | BI359221 | BI359221 949040H08 |
| | 18 | 623.5 | 88.3 | 540 | 6 | CA301023 | CA301023 SCRLLV105 |
| c | 19 | 623 | 88.2 | 489 | 2 | BG549199 | BG549199 947073E08 |
| | 20 | 612 | 86.7 | 482 | 2 | BG458495 | BG458495 947044G05 |
| | 21 | 585 | 82.9 | 363 | 2 | BI096564 | BI096564 949012C10 |
| c | 22 | 576 | 81.6 | 871 | 1 | AI374506 | AI374506 MEST6-D3. |
| | 23 | 558 | 79.0 | 396 | 2 | BG458566 | BG458566 947045G01 |
| c | 24 | 547 | 77.5 | 606 | 2 | BG462527 | BG462527 947057H09 |
| c | 25 | 530.5 | 75.1 | 819 | 10 | CZ296823 | CZ296823 ZMMBF0066 |
| | 26 | 529 | 74.9 | 336 | 3 | BI478541 | BI478541 949070P06 |
| | 27 | 523 | 74.1 | 335 | 2 | BG462521 | BG462521 947057H05 |
| c | 28 | 521 | 73.8 | 387 | 2 | BG550202 | BG550202 947038C07 |
| c | 29 | 507.5 | 71.9 | 685 | 10 | CW239849 | CW239849 104_698_1 |
| c | 30 | 502 | 71.1 | 469 | 3 | BM380889 | BM380889 MEST526-F |
| | 31 | 497.5 | 70.5 | 441 | 10 | CL965086 | CL965086 OsIFCC011 |
| | 32 | 497.5 | 70.5 | 508 | 7 | CF953034 | CF953034 693rsiceb |
| c | 33 | 497.5 | 70.5 | 748 | 6 | CB679884 | CB679884 OSJNEf03P |
| | 34 | 497 | 70.4 | 349 | 2 | BG549200 | BG549200 947073E08 |
| | 35 | 495.5 | 70.2 | 536 | 7 | CF955858 | CF955858 4852rsice |
| | 36 | 482 | 68.3 | 357 | 2 | BG316582 | BG316582 947021A01 |
| c | 37 | 468 | 66.3 | 563 | 2 | BG462520 | BG462520 947057H05 |
| | 38 | 466.5 | 66.1 | 551 | 6 | CA500123 | CA500123 WHE4015_F |
| | 39 | 466.5 | 66.1 | 579 | 2 | BE425970 | BE425970 WHE0326_C |
| | 40 | 466.5 | 66.1 | 596 | 3 | BM134808 | BM134808 WHE0453_H |
| | 41 | 466.5 | 66.1 | 627 | 6 | CA499879 | CA499879 WHE4012_G |
| | 42 | 466.5 | 66.1 | 644 | 6 | CD931399 | CD931399 GR45.114G |
| | 43 | 466.5 | 66.1 | 814 | 8 | CV780906 | CV780906 FGAS07531 |
| | 44 | 466.5 | 66.1 | 830 | 8 | CV766226 | CV766226 FGAS06061 |
| | 45 | 466.5 | 66.1 | 840 | 8 | CV777091 | CV777091 FGAS07149 |

ALIGNMENTS

RESULT 1
BI358791
LOCUS BI358791 443 bp mRNA linear EST 31-JUL-2001
DEFINITION 949040H08.y1 949 - Juvenile leaf and shoot cDNA from Steve Moose Zea mays cDNA, mRNA sequence.
ACCESSION BI358791
VERSION BI358791.1 GI:15053246
KEYWORDS EST.
SOURCE Zea mays
ORGANISM Zea mays
Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta; Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD clade; Panicoideae; Andropogoneae; Zea.
REFERENCE 1 (bases 1 to 443)
AUTHORS Walbot,V.
TITLE Maize ESTs from various cDNA libraries sequenced at Stanford University
JOURNAL Unpublished (1999)
COMMENT Contact: Walbot V
Department of Biological Sciences
Stanford University
855 California Ave, Palo Alto, CA 94304, USA
Tel: 650 723 2227
Fax: 650 725 8221
Email: walbot@stanford.edu
Plate: 949040 row: H column: 08.
FEATURES Location/Qualifiers
source 1. .443
/organism="Zea mays"
/mol_type="mRNA"
/cultivar="W64A"

/db_xref="taxon:4577"
/tissue_type="immature leaf primordium and vegetative meristem"
/dev_stage="4 stages from 3-13 days after imbibing"
/lab_host="E. coli XLOLR"
/clone_lib="949 - Juvenile leaf and shoot cDNA from Steve Moose"
/note="Organ: juvenile vegetative shoots; Vector: pAD-GAL4-2.1; Site_1: EcoRI; Site_2: XhoI; Equal amounts of total RNA by weight from 4 tissue sources (see below) were pooled, polyA+ RNA isolated, and cDNA synthesized for EcoRI (5') and XhoI (3') directional cloning into lambda Hybrizap vector from Stratagene. Tissue Sources: 1. Whole shoots 3 days after sowing/imbibing in wet soil. 2. Basal 1.5 cm shoots 6 days after sowing - includes yellow portions of developing leaves 1-5, primordia from 6-8, and the vegetative apex. 3. Non-green portions of developing leaves 4-5 and the vegetative apex, including adult leaf primordia, 9 days after sowing. 4. Partially expanded and greening leaves 4-5 at 13 days after sowing."

ORIGIN

Alignment Scores:

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|---|---|---|---|
| Pred. No.: | 9.13e-60 | Length: | 443 |
| Score: | 706.00 | Matches: | 143 |
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| Best Local Similarity: | 100.0% | Mismatches: | 0 |
| Query Match: | 100.0% | Indels: | 0 |
| DB: | 3 | Gaps: | 0 |

US-10-759-548B-5 (1-143) x BI358791 (1-443)

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Qy          1 MetAlaLeuSerLeuSerLeuAlaArgProAlaProLeuAlaValSerAlaGlyAlaGly 20
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Db          1 ATGGCGCTGTCCCTCTCCCTCGCGCGCCCCGCGCCCCTCGCCGTTTCCGCCGGCGCAGGA 60

Qy         21 AlaArgLysLeuProAlaAlaSerLeuAlaPheProAlaLysSerPhePheGlyAlaPro 40
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         61 GCCAGGAAGCTACCCGCAGCCAGCCTCGCATTCCCGGCGAAATCCTTCTTCGGCGCGCCG 120

Qy         41 LeuAlaAlaThrAlaAlaSerValAlaSerProLeuProArgLysProAlaThrSerThr 60
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Db        121 CTGGCCGCCACCGCGGCCTCCGTCGCGTCGCCGCTCCCGCGCAAGCCGGCCACCTCCACC 180

Qy         61 ThrSerLeuGluValValAlaAlaGlyLysLysGlyTyrLysMetLysThrHisLysAla 80
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Db        181 ACCTCGCTCGAGGTCGTCGCGGCGGGGAAGAAGGGCTACAAGATGAAGACGCACAAGGCG 240

Qy         81 SerAlaLysArgPheArgValThrGlyArgGlyLysIleValArgArgCysAlaGlyLys 100
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Db        241 TCGGCGAAGCGGTTCCGGGTGACGGGGAGGGGCAAGATCGTGCGGCGGTGCGCCGGGAAG 300

Qy        101 GlnHisLeuLeuAlaLysLysAsnThrLysArgLysLysArgLeuSerLysMetValGln 120
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        301 CAGCACTTGCTCGCCAAGAAGAACACCAAGCGCAAGAAGAGGCTCTCGAAGATGGTGCAA 360

Qy        121 ValAsnLysSerAspTyrAspAsnValThrGlyAlaLeuProTyrLeuLysValAsnArg 140
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Db        361 GTCAACAAGAGTGACTACGACAATGTTACGGGTGCACTGCCCTACCTCAAAGTGAATAGG 420

Qy        141 LysAlaAsn 143
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Db        421 AAAGCAAAC 429
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RESULT 2
BI478792/c

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LOCUS       BI478792                555 bp    mRNA    linear   EST 28-AUG-2001
DEFINITION  949070F06.x1 949 - Juvenile leaf and shoot cDNA from Steve Moose
            Zea mays cDNA, mRNA sequence.
ACCESSION   BI478792
VERSION     BI478792.1  GI:15323570
KEYWORDS    EST.
SOURCE      Zea mays
  ORGANISM  Zea mays
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
            clade; Panicoideae; Andropogoneae; Zea.
REFERENCE   1  (bases 1 to 555)
  AUTHORS   Walbot,V.
  TITLE     Maize ESTs from various cDNA libraries sequenced at Stanford
            University
  JOURNAL   Unpublished (1999)
COMMENT     Contact: Walbot V
            Department of Biological Sciences
            Stanford University
            855 California Ave, Palo Alto, CA 94304, USA
            Tel: 650 723 2227
            Fax: 650 725 8221
            Email: walbot@stanford.edu
            Plate: 949070  row: F  column: 06.
FEATURES             Location/Qualifiers
     source          1. .555
                     /organism="Zea mays"
                     /mol_type="mRNA"
                     /cultivar="W64A"
                     /db_xref="taxon:4577"
                     /tissue_type="immature leaf primordium and vegetative
                     meristem"
                     /dev_stage="4 stages from 3-13 days after imbibing"
                     /lab_host="E. coli XLOLR"
                     /clone_lib="949 - Juvenile leaf and shoot cDNA from Steve
                     Moose"
                     /note="Organ: juvenile vegetative shoots; Vector:
                     pAD-GAL4-2.1; Site_1: EcoRI; Site_2: XhoI; Equal amounts
                     of total RNA by weight from 4 tissue sources (see below)
                     were pooled, polyA+ RNA isolated, and cDNA synthesized for
                     EcoRI (5') and XhoI (3') directional cloning into lambda
                     Hybrizap vector from Stratagene. Tissue Sources: 1. Whole
                     shoots 3 days after sowing/imbibing in wet soil. 2. Basal
                     1.5 cm shoots 6 days after sowing - includes yellow
                     portions of developing leaves 1-5, primordia from 6-8, and
                     the vegetative apex. 3. Non-green portions of developing
                     leaves 4-5 and the vegetative apex, including adult leaf
                     primordia, 9 days after sowing. 4. Partially expanded and
                     greening leaves 4-5 at 13 days after sowing."
ORIGIN
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Alignment Scores:

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| Best Local Similarity: | 100.0% | Mismatches: | 0 |
| Query Match: | 100.0% | Indels: | 0 |
| DB: | 3 | Gaps: | 0 |

US-10-759-548B-5 (1-143) x BI478792 (1-555)

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Qy          1 MetAlaLeuSerLeuSerLeuAlaArgProAlaProLeuAlaValSerAlaGlyAlaGly 20
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Db        527 ATGGCGCTGTCCCTCTCCCTCGCGCGCCCCGCGCCCCTCGCCGTTTCCGCCGGCGCAGGA 468

Qy         21 AlaArgLysLeuProAlaAlaSerLeuAlaPheProAlaLysSerPhePheGlyAlaPro 40
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Db        467 GCCAGGAAGCTACCCGCAGCCAGCCTCGCATTCCCGGCGAAATCCTTCTTCGGCGCGCCG 408

Qy         41 LeuAlaAlaThrAlaAlaSerValAlaSerProLeuProArgLysProAlaThrSerThr 60
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Qy         61 ThrSerLeuGluValValAlaAlaGlyLysLysGlyTyrLysMetLysThrHisLysAla 80
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Qy         81 SerAlaLysArgPheArgValThrGlyArgGlyLysIleValArgArgCysAlaGlyLys 100
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Db        287 TCGGCGAAGCGGTTCCGGGTGACGGGGAGGGGCAAGATCGTGCGGCGGTGCGCCGGGAAG 228
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Qy        101 GlnHisLeuLeuAlaLysLysAsnThrLysArgLysLysArgLeuSerLysMetValGln 120
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Db        324 CAGCACTTACTCGCCAAGAAGAACACCAAACGCAAGAAGAGGCTCTCCAAGATGGTCCAA 383

Qy        121 ValAsnLysSerAspTyrAspAsnValThrGlyAlaLeuProTyrLeuLysValAsnArg 140
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        384 GTCAACAAGAGTGACTACGACAATGTGACGGGTGCACTGCCCTACCTCAAAGTGAATAGG 443

Qy        141 LysAlaAsn 143
              |||||||||
Db        444 AAAGCAAAC 452

RESULT 11
BI233829
LOCUS       BI233829                430 bp    mRNA    linear   EST 11-JUL-2001
DEFINITION  949032H11.y2 949 - Juvenile leaf and shoot cDNA from Steve Moose
            Zea mays cDNA, mRNA sequence.
ACCESSION   BI233829
VERSION     BI233829.1  GI:14701411
KEYWORDS    EST.
SOURCE      Zea mays
  ORGANISM  Zea mays
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
            clade; Panicoideae; Andropogoneae; Zea.
REFERENCE   1  (bases 1 to 430)
  AUTHORS   Walbot,V.
  TITLE     Maize ESTs from various cDNA libraries sequenced at Stanford
            University
  JOURNAL   Unpublished (1999)
COMMENT     Contact: Walbot V
            Department of Biological Sciences
            Stanford University
            855 California Ave, Palo Alto, CA 94304, USA
            Tel: 650 723 2227
            Fax: 650 725 8221
            Email: walbot@stanford.edu
            Plate: 949032  row: H  column: 11.
FEATURES             Location/Qualifiers
     source          1. .430
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                     /mol_type="mRNA"
                     /cultivar="W64A"
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                     /tissue_type="immature leaf primordium and vegetative
                     meristem"
                     /dev_stage="4 stages from 3-13 days after imbibing"
                     /lab_host="E. coli XLOLR"
                     /clone_lib="949 - Juvenile leaf and shoot cDNA from Steve
                     Moose"
                     /note="Organ: juvenile vegetative shoots; Vector:
                     pAD-GAL4-2.1; Site_1: EcoRI; Site_2: XhoI; Equal amounts
                     of total RNA by weight from 4 tissue sources (see below)
                     were pooled, polyA+ RNA isolated, and cDNA synthesized for
                     EcoRI (5') and XhoI (3') directional cloning into lambda
                     Hybrizap vector from Stratagene. Tissue Sources: 1. Whole
                     shoots 3 days after sowing/imbibing in wet soil. 2. Basal
                     1.5 cm shoots 6 days after sowing - includes yellow
                     portions of developing leaves 1-5, primordia from 6-8, and
                     the vegetative apex. 3. Non-green portions of developing
                     leaves 4-5 and the vegetative apex,  including adult leaf
                     primordia, 9 days after sowing. 4. Partially expanded and
                     greening leaves 4-5 at 13 days after sowing."
ORIGIN

Alignment Scores:
Pred. No.:              1.6e-56       Length:          430
Score:                  673.00        Matches:         135
Percent Similarity:     100.0%        Conservative:    0
Best Local Similarity:  100.0%        Mismatches:      0
Query Match:            95.3%         Indels:          0
DB:                     2             Gaps:            0

US-10-759-548B-5 (1-143) x BI233829 (1-430)

Qy          9 ArgProAlaProLeuAlaValSerAlaGlyAlaGlyAlaArgLysLeuProAlaAlaSer 28
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Qy         29 LeuAlaProProAlaLysSerPhePheGlyAlaProLeuAlaAlaThrAlaAlaSerVal 48
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db         62 CTCGCATTCCCGGCGAAATCCTTCTTCGGCGCGCCGCTGGCCGCCACCGCGGCCTCCGTC 121

Qy         49 AlaSerProLeuProArgLysProAlaThrSerThrThrSerLeuGluValValAlaAla 68
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Db        122 GCGTCGCCGCTCCCGCGCAAGCCGGCCACCTCCACCACCTCGCTCGAGGTCGTCGCGGCG 181

Qy         69 GlyLysLysGlyTyrLysMetLysThrHisLysAlaSerAlaLysArgPheArgValThr 88
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Db        182 GGGAAGAAGGGCTACAAGATGAAGACGCACAAGGCGTCGGCGAAGCGGTTCCGGGTGACG 241

Qy         89 GlyArgGlyLysIleValArgArgCysAlaGlyLysGlnHisLeuLeuAlaLysLysAsn 108
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Db        242 GGGAGGGGCAAGATCGTGCGGCGGTGCGCCGGGAAGCAGCACTTGCTCGCCAAGAAGAAC 301

Qy        109 ThrLysArgLysLysArgLeuSerLysMetValGlnValAsnLysSerAspTyrAspAsn 128
              ||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||||
Db        302 ACCAAGCGCAAGAAGAGGCTCTCGAAGATGGTGCAAGTCAACAAGAGTGACTACGACAAT 361

Qy        129 ValThrGlyAlaLeuProTyrLeuLysValAsnArgLysAlaAsn 143
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Db        362 GTTACGGGTGCACTGCCCTACCTCAAAGTGAATAGGAAAGCAAAC 406

RESULT 12
BG317125
LOCUS       BG317125                412 bp    mRNA    linear   EST 26-FEB-2001
DEFINITION  947025F08.y1 947 - 2 week shoot from Barkan lab Zea mays cDNA, mRNA
            sequence.
ACCESSION   BG317125
VERSION     BG317125.1  GI:13126555
KEYWORDS    EST.
SOURCE      Zea mays
  ORGANISM  Zea mays
            Eukaryota; Viridiplantae; Streptophyta; Embryophyta; Tracheophyta;
            Spermatophyta; Magnoliophyta; Liliopsida; Poales; Poaceae; PACCAD
            clade; Panicoideae; Andropogoneae; Zea.
REFERENCE   1  (bases 1 to 412)
  AUTHORS   Walbot,V.
  TITLE     Maize ESTs from various cDNA libraries sequenced at Stanford
            University
  JOURNAL   Unpublished (1999)
COMMENT     Contact: Walbot V
            Department of Biological Sciences
            Stanford University
            855 California Ave, Palo Alto, CA 94304, USA
            Tel: 650 723 2227
            Fax: 650 725 8221
            Email: walbot@stanford.edu
            Plate: 947025  row: F  column: 08.
FEATURES             Location/Qualifiers
     source          1. .412
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                     /mol_type="mRNA"
                     /cultivar="B73"
                     /db_xref="taxon:4577"
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                     /dev_stage="2 week old seedling (3 leaves)"
                     /lab_host="XL1-Blue"
                     /clone_lib="947 - 2 week shoot from Barkan lab"
                     /note="Organ: shoot; Vector: Lambda ZAP (pBlueScript SK-);
                     Site_1: EcoRI; Site_2: XhoI; Directionally cloned using
                     Stratagene's UniZap XR cDNA cloning kit with  the 5' end
                     at the EcoRI site. The library represents 8 x 10e5
                     independent recombinant phage. The plants were greenhouse
                     grown."
```